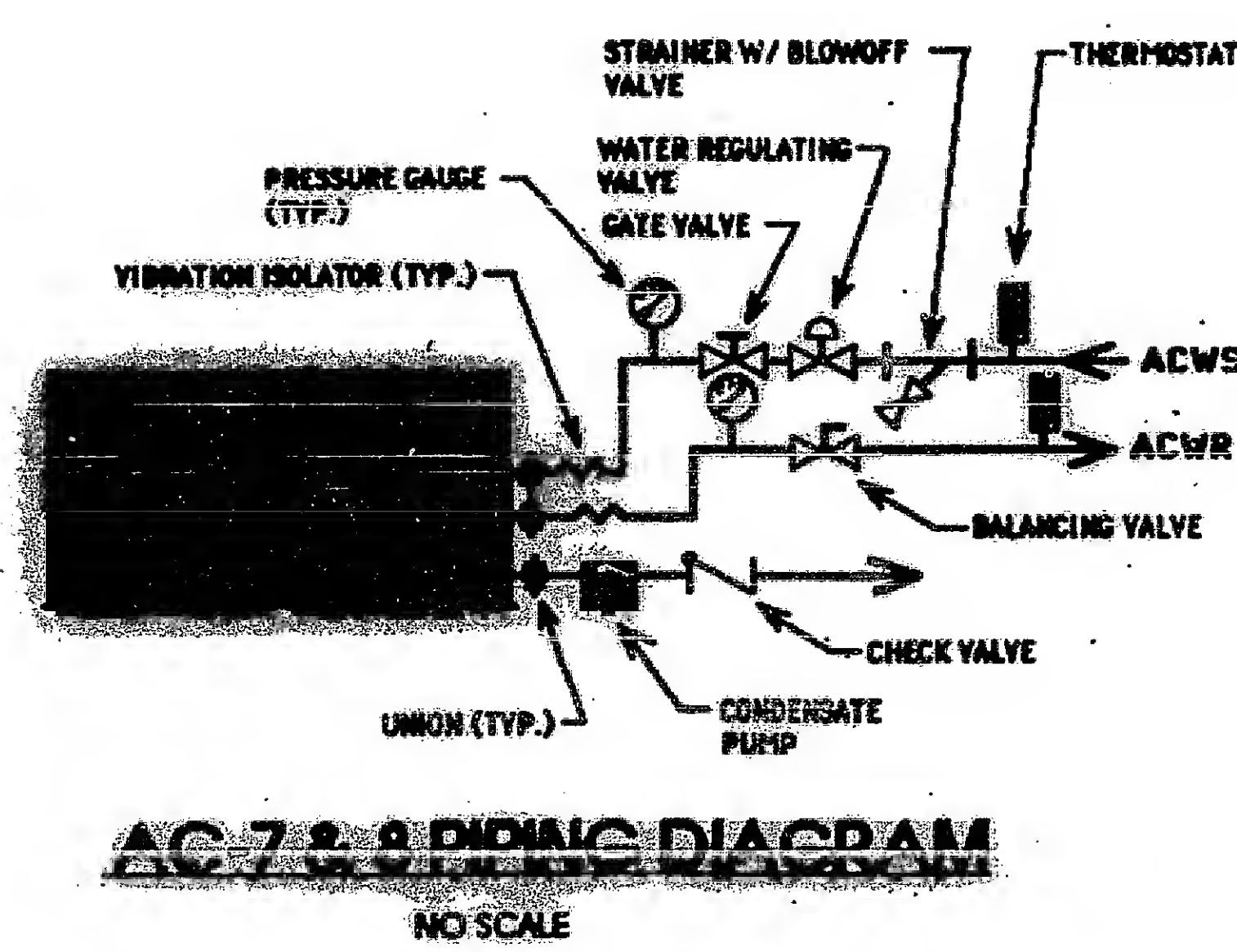
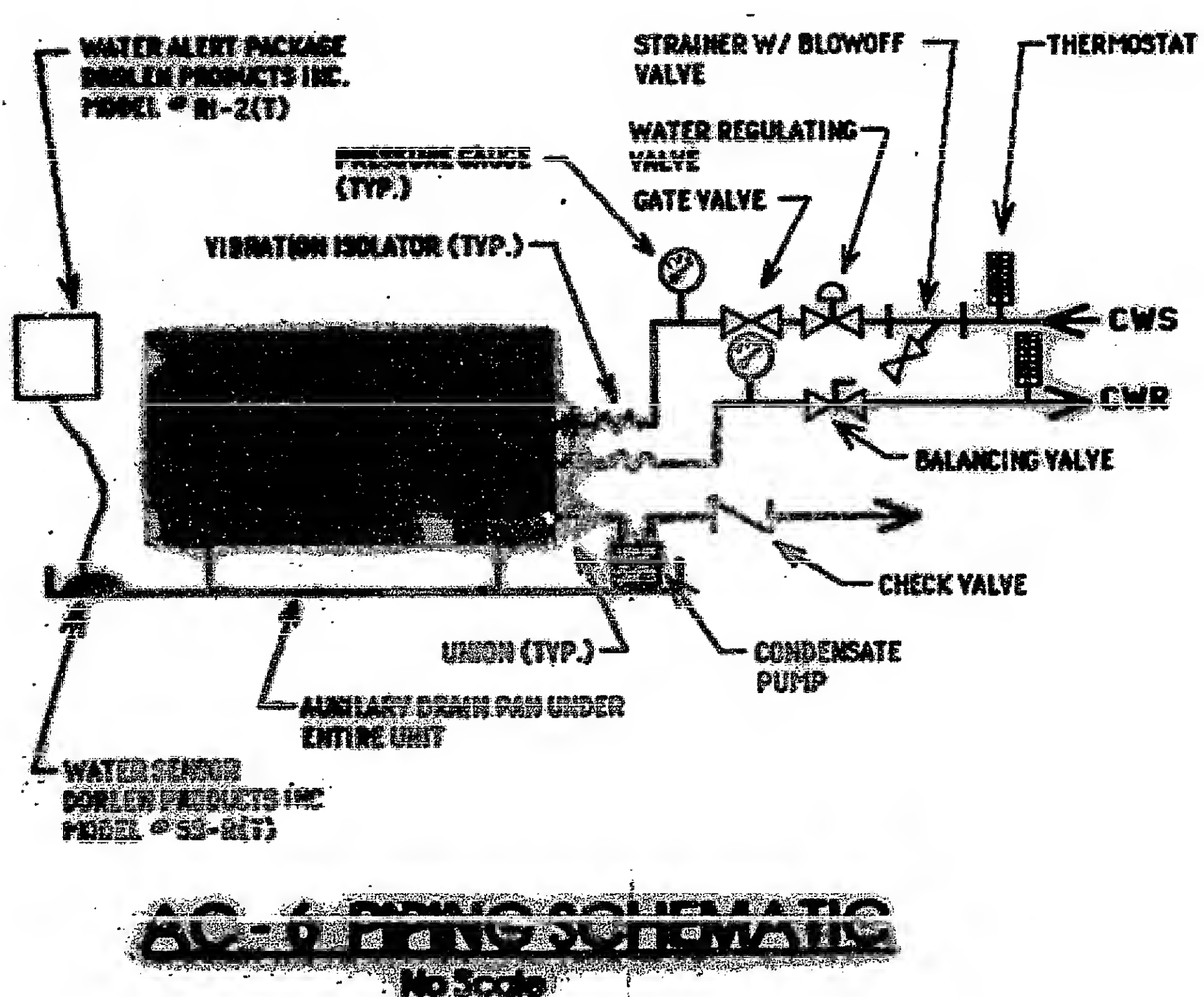
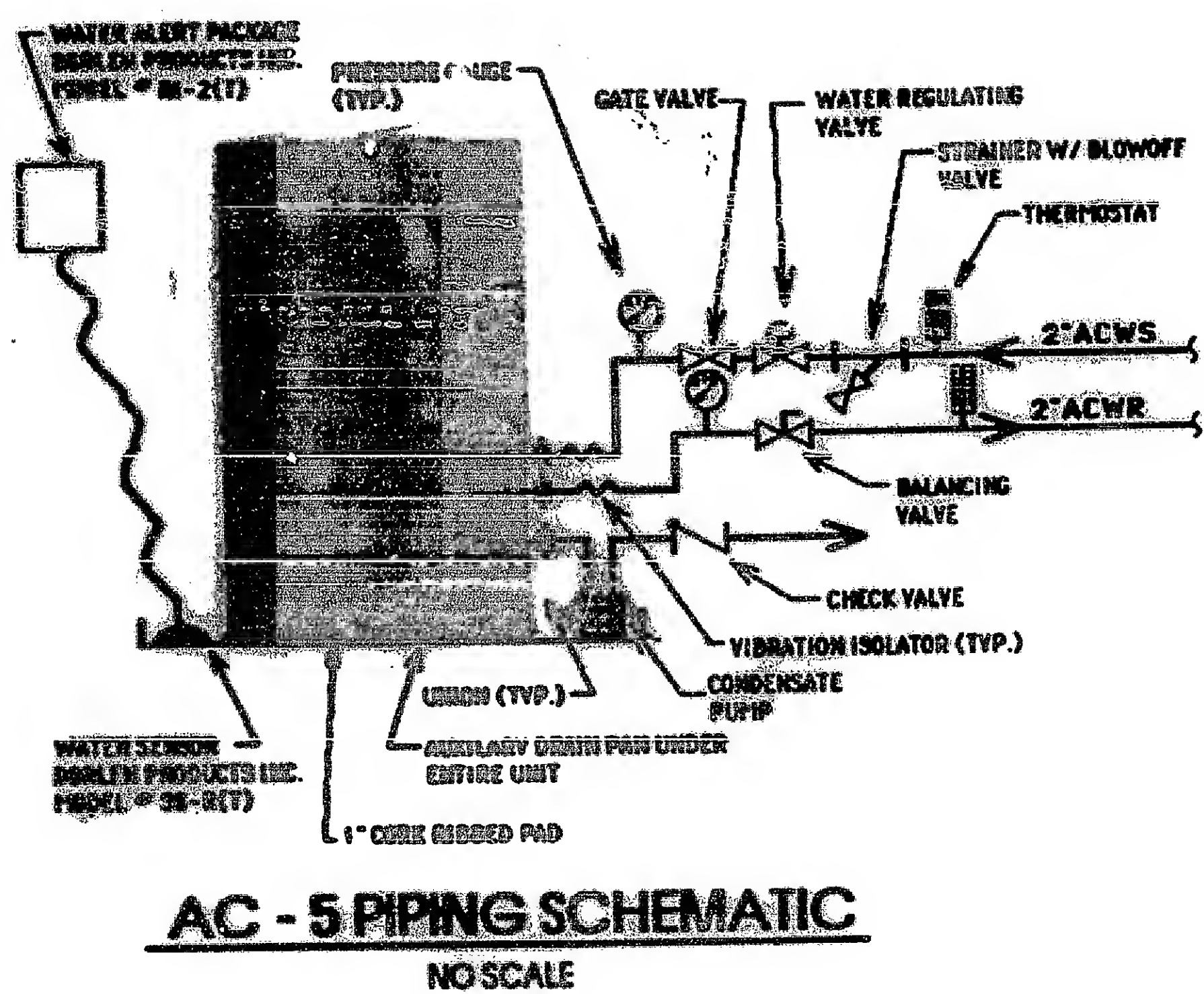


# VENTILATION INDEX

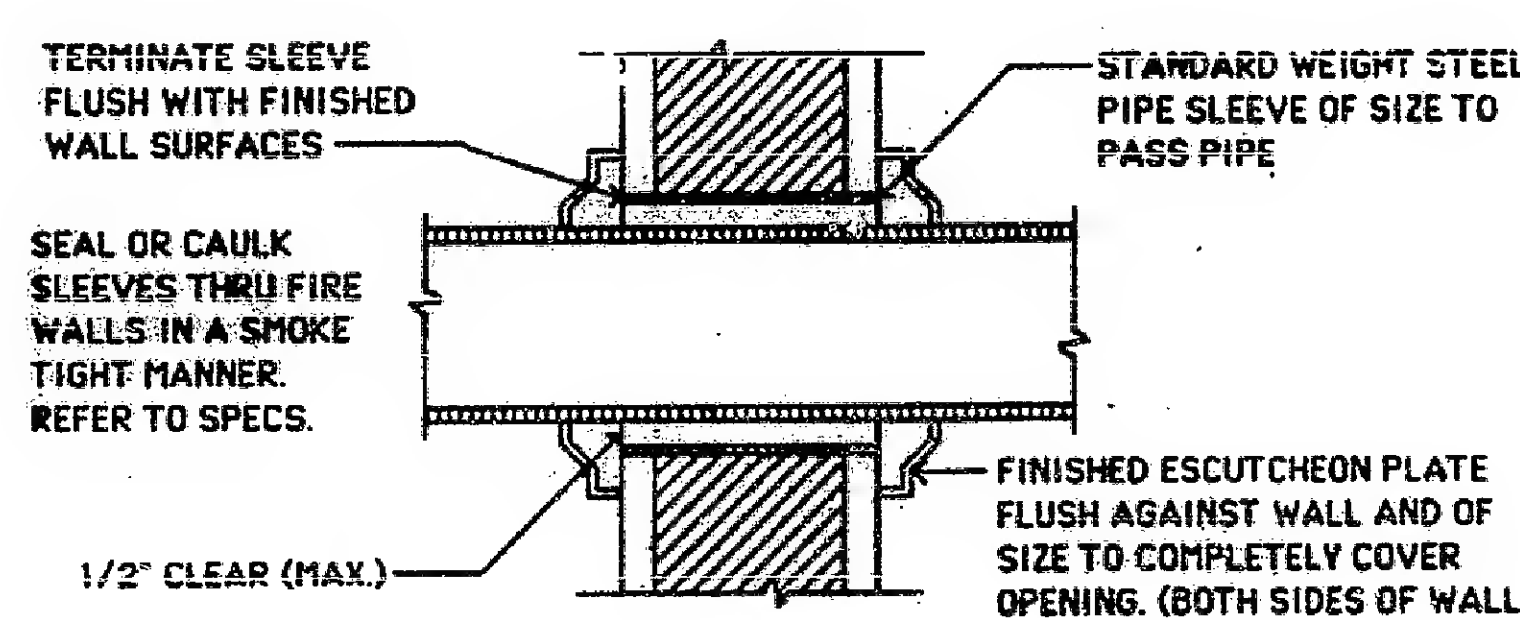
RM	AREA	P	VOLUME	VENT. NO.	REQ. SUP. CFM	REQ. RET. CFM	REQ. SUP. CFM/SCF	REQ. RET. CFM/SCF	ACT. SUP. CFM/SCF	ACT. RET. CFM/SCF
1	440.0	127	377.33	689	590	590	0.9	0.9	0.9	0.9
2	310.0	57	265.25	1010	1860	1860	0.6	0.6	0.7	0.7
3	336.0	8	289.35	784	504	504	0.9	0.9	1.2	1.2
4	175.0	2	1500.63	1625	87	87	0.5	0.5	0.7	0.7
5	125.0	2	1097.6	1185	76	76	0.6	0.6	0.7	0.7
6	180.0	2	1449.18	1509	84	84	0.5	0.5	0.7	0.7
7	125.0	2	1097.6	1185	76	76	0.6	0.6	0.7	0.7
8	116.0	0	NO OCCUPANCY - STORAGE ROOM							
9	86.0	6	737.45	266	103	103	1.2	1.2	1.7	1.7
10	110.0	0	NO OCCUPANCY - TAP STORAGE ROOM							
11	90.0	2	771.75	835	81	81	0.9	0.9	1.1	1.1
12	190.0	4	1629.25	882	114	114	0.6	0.6	0.8	0.8
13	230.0	0	NO OCCUPANCY - TAP STORAGE ROOM							
14	260.0	4	2116	2229	192	192	0.4	0.4	0.5	0.5
MECH	90.0	0	NO OCCUPANCY - MECHANICAL EQUIPMENT ROOM							



1. FIRE DAMPER SEE NOTE 1 & 6
2. DUCT COLLAR CONNECTION SEE NOTE 2, 3 & 8
3. SLEEVE SEE NOTE 2, 4, 7, 8 & 9
4. TAP SEE NOTE 2, 3, 5, 6 & 8
5. RETAINING ANGLE SEE NOTE 7
6. ACCESS DOOR SEE NOTE 10
7. SUPPORT SEE NOTE 10
8. STEEL STUD FRAMED OPENING IN WALL SEE ARCHITECTURAL DRAWING FOR DETAILS

## FIRE DAMPER NOTES

1. All fire dampers shall be rated to maintain the rating of the fire separation approved and labeled by Underwriters Laboratories (U.L.) and New York Standards and Appeals (S.A.). Installation shall be in accordance with the manufacturer's instructions. Fire damper shall be similar and equal to Type A as manufactured by Air Balance Inc., Balance Inc., Air Dampers Inc., or Airstream Products Inc. A copy of the Board of Standards and Appeals Calendar from showing approval of the product shall be submitted for record.
2. All work shall conform, as a minimum, with ASHRAE & SMACNA.
3. Connections between collar and ductwork shall be breakaway type such as other slip type in accordance with SMACNA Plate 15A, 4th Edition, and Fire Damper Guide, 1970.
4. Fire damper sleeve at partition of hollow fire rated construction shall be gauge sheetmetal in conformance with New York City Building Code C2.
5. Tape shall not be of lighter gauge than connecting ductwork. Minimum gauge shall be in two (2) rows, six (6) inches apart, minimum two (2) welds shall be in two (2) rows, six (6) inches apart, minimum two (2) welds shall be in two (2) rows, six (6) inches apart.
6. Fire damper and taps shall be attached to sleeve by spotwelding. Welds shall be in two (2) rows, six (6) inches apart, minimum two (2) welds shall be in two (2) rows, six (6) inches apart.
7. Retaining angles shall be placed on both sides of wall and secured to steel metal screws  $\frac{1}{4}$ " dia. nuts and bolts 6 inches center to center, minimum. Angles shall be 1-1/2" x 1-1/2" x 14 gauge galvanized steel and shall not be wall.
8. The contractor shall seal all joints of the sleeve with sealant. The joint between ductwork shall be made tight and secured by No. 10 sheet metal screws in rectangular duct, or three (3) per round duct), coated with sealant and then be alright. Sealant shall be 3M Company No. 880 or approved equal and Vinyl Duct Tape as manufactured by Nashua Corp. or approved equal.
9. To allow for expansion, dampers shall have a top clearance equivalent to damper height. The side clearance shall be 1/8" for each foot of damper to the right and left of the collar. The maximum clearance for the top and bottom shall be 1/2".
10. Access door shall be placed on either side of the sleeve only. If the side permit access to the damper for inspection and maintenance, the door must be bottom of the sleeve. In any event, access to the fire damper must be as



TYPICAL DETAIL OF PIPE THRU RATED WALL  
NO SCALE